

ABSTRACT

A production schedule creation device includes: a production simulator (100) simulating a production process expressing the production state and the production constraint of the production process; a mathematical expression holding device holding a mathematical model (110) created by acquiring information relating to creation of the production schedule in attention as a mathematical model expressing, in a mathematical expression, the production state and the production constraint of the production process; and an optimization calculation device (120) performing the optimization calculation by using a predetermined evaluation function for the mathematical model (110) and calculating a production instruction for the production simulator. The production instruction obtained by the optimization calculation device is supplied to the production simulator (100) so as to execute simulation. Thus, an optimum solution can be obtained by performing only one simulation.